## **ABSTRACT**

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A method and a device for carrying out surface plasmon resonance measurement. A beam of electromagnetic radiation is produced by a source of electromagnetic radiation. The beam of electromagnetic radiation is directed through a prism onto a material layer in an angle of incidence, which material layer covers a planar surface of the prism. A resonance phenomenon is caused. A beam of reflected electromagnetic radiation is produced and directed by the surface to a detector for detecting the level of intensity of the beam of reflected electromagnetic radiation. The change of intensity of the beam of reflected electromagnetic radiation, caused by the surface resonance phenomenon, is measured. The beam of reflected electromagnetic radiation is reflected with a mirror to the detector.